

L; 10658-66 EWT(1) IJP(c) AT

ACC NR: AP5028308 SOURCE CODE: UR/0057/65/035/011/1960/1971

AUTHOR: Mikhaylovskiy, A.B.; Pashitskiy, B.A.

ORG: none

21, 44,55 Zi; 44,55

TITLE: On the theory of the stability of an ion beam injected transversely to a magnetic field into a plasma

SOURCE: Zhurnel tekhnicheskoy fiziki, v. 35, no. 11, 1965, 1960-1971

TOPIC TAGS: plasma instability, plasma beam interaction, magnetic trap, magnetic mirror, ion beam, plasma injection, magnetic field

ABSTRACT: The authors discuss the stability of a nearly monoenergetic ion beam injected transversely to the magnetic field into a magnetic trap containing a plasma with a Maxwell distribution of electron and ion velocities. The discussion is applicable to the case of a trap in which ions are continuously injected, because the captured ions quickly reach a Maxwell-like velocity distribution owing to the strong instabilities that develop. The dispersion equation is derived for a monoenergetic beam and a uniform magnetic field, and the roots are derived and discussed for frequencies near harmonics of the ion Larmor frequency and for frequencies in the continuous spectrum far above the ion Larmor frequency but below the electron Larmor frequency. Oscillations near the ion Larmor frequency are found to be unstable even for very low beam densities, and even when longitudinal ion velocities and cyclotron damping are taken into account. The high frequency oscillations are stable for Card 1/2

sufficiently low beam density (or sufficiently high plasma density). The effect of the longitudinal inhomogeneity of the magnetic field is discussed, the frequencies of the oscillations being found by equating to an integral multiple of x the integral along a line of force between the reflection points of the longitudinal component of the wave vector. When longitudinal ion velocities and cyclotron damping are taken into account, the longitudinal inhomogeneity of the magnetic field is found to increase the critical beam density above which instability occurs. The effect of a distribution of beam ion velocities (energy inhomogeneity) is also discussed, and it is shown that this, too, tends to stabilize the system. It is concluded that injection into a magnetic trap of a monoenergetic ion beam transversely to the magnetic

field can excite oscillations over a wide range of frequency and wavelength, and these can give rise to large anomalous turbulent diffusion. Heans exist, however, for partially stabilizing some of these oscillations. In particular, the long wavelength ion cyclotron oscillations are stabilized for sufficiently low beam density by a low plasma ion temperature, and the high frequency oscillations in the continuous spectrum are stabilized by a distribution of beam ion velocities, i.e., by the use of a non-monoenergetic beam. A curved magnetic field geometry (a magnetic mirror system or a corrugated field) raduces the increment of the unstable oscillations. The authors thank V. I. Pistumovich and A. V. Timofeyev for discussing the results. Orig. art. has:

SUB CODE: 20

L 10658-66

SUM DATE: 01Feb65/

ORIG. MIT: 004

OTH REF: 000

HW 2/2

SHEVCHENKO, V., konstruktor (Frunze); LEVENOK, A.; PLODUKHIN, A.

(Saransk, Mordovskoy &SSR); NIKHEL'MAN, A.; MART'IANOV, I.

(Ivanova); VETROV, A., mekhanik (States) Novki, Vladimirskaya oblast')

From reader to reader. Tekh.mol. 31 no.2:28-29 '63.

(MIRA 16:6)

1. Burinskiy sovkhoz, Kunashakskiy rayon, Chelyabinskaya oblast', (for Nikhel'man).

(Technological innovations)

NIKHINSON, A. G.

Nasopharynx

Spatula-cannula for the irrigation of the ansopharynx. Vest. oto-rin., 14, No. 2, 1952.

Monthly List of Russian Accessions, Library of Congress, June 1952. Unclassified.

NIKHINSON, A.G.

Age factor in anatomy of the nasopharynx. Vest. otorinolar., Moskva 14 no.6:76-77 Nov-Dec 1952. (CIML 23:4)

1. Candidate Medical Sciences. 2. Of the Department of Operative Surgery (Head -- Prof. M. K. Gitis), Omsk Medical Institute.

TIMETHISON, A. G.

Ear - Diseases

Otitis in dispepsia and lysentery in infants. Vop. jediat. i wair. Lat. i det. 20 No. 3, 1752.

9. Monthly List of Russian Accessions, Library of Congress, Seitember 1792 1993, Uncl.

NIKHINSON, A.G., kandidat mediteinskikh nauk

Laryngeal cyst. Vest.oto-rin. 19 no.2:114-115 Kr-Ap '57.
(MLRA 10:6)

1. Is I gorodekoy klinicheskoy bol'nitsy g. Omska.
(LARYNI, cyst
surg. (Rus))

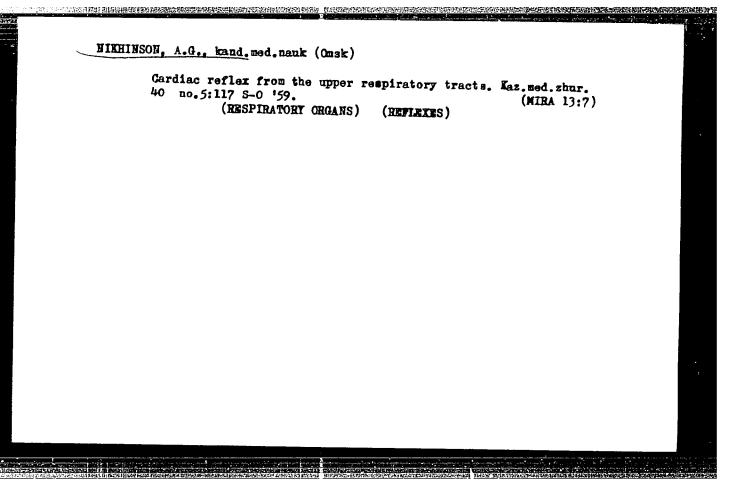
NICH INSON, A.G.

Morphological changes in the tonsile in tuleremie and brucellosis.

Sov.med. 21 Supplement:25 '57. (MIRA 11:2)

1. Is 2-y infektsionnoy gorodekoy klinicheskoy bol'nitay Omaka.

(TONSILS-DISHASHS) (TULARMMIA) (BRUCELLOSIS)



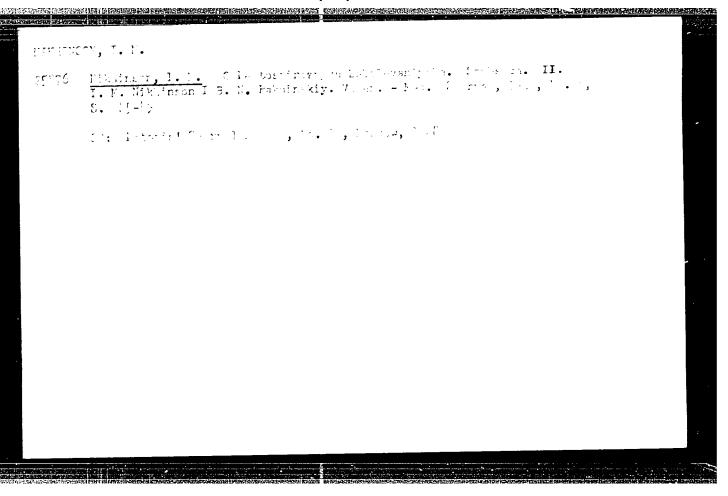
NIKHINSON, A.G., kand.med.nauk

Unconditioned reflex interrelations of different areas of the upper respiratory tract and their role in the pathogenesis of angina. Zhur. ush., nos. i gorl.bol. 22 no.1:4-8 Ja-F '62. (MIRA 15:5)

1. Iz Otorinolaringologicheskoy kafedry (zav. - prof. V.G. Yermolayev)
Leningradskogo ordena Lenina instituta usovershenstvovaniya vrachey
i iz 1-y gorodskoy klinicheskoy bol'nitsy g.Omska (glavnyy vrach
0.B. Vinogradova).

(RESPIRATORY ORGANS) (THROAT—DISEASES)

Some data on the physiology of the acoustic analysor. Zimr.ush., (MIRA 1612) nos.i gorl.bol. 22 no.4:88-91 Jl-4g 162. (ACOUSTIC NERVE)



NIKHINSON, I.M. 25876

O Leptospiroznykh Zabolevaniyakh Soobshch. II I.M. Nikhinson I B.N. Pakhinskiy. Voyen.-Med. Zhurnal, 1948, No.6, S. 45-49

SO: LETOPIS NO. 30, 1948

MIXHIMSON, I.M., podpolkovnik meditsinskoy sluzsby; LEV, A.S., podpolkovnik meditsinskoy sluzsby

Some data on the role of the water factor in the epidemiology of dysentery. Yoen.-med. zhur. no.4;59-60 Ap '56. (MLRA 9:9)

(WATER--BACTERIOLOGY) (DYSENTERY)

NIKHINSON, I.M.

"Collection of Air Samples With the Help of a Filter Cartridge and Gas Mask to Detect Microflora," by I. M. Nikhinson, I. A. Katsnel'son, and R. D. Gorodetskiy, Voyenno-Meditsinskiy Zhurnal No 11, Nov 56, pp 54-55

"We proposed and tested the filter cartridge of a filtering gas mask to simplify the method of collecting air samples, especially under field conditions, for the purpose of observing microorganisms, rickett-siae, and viruses in the samples.

"The filter cartridge is a tin cylinder 1.8 cm in diameter and 2.5 cm high. The botton of the cylinder has 10-20 openings. The other and is open.

"On the interior surface of the grid of the cartridge, a pad consisting of six hears of gauze is closely compressed by a bottomless cylinder 4.5 cm high which is set inside the first cylinder (the dimensions of the cartridge can be varied depending on the size of the openings in the casing of the gas mask). The converted filter cartridge is wrapped in paper or placed in a metal or wooden covering and sterilized.

S4M.1345

NIKHINSON, IM.

"Before collection of air samples, the sterile cartridge, removed from the paper, is set into the opening in the bottom of the gas mesk housing. From 5 to 6 minutes after use of the gas mask with the filter cartridge has begun, the cartridge is removed and aken into a bacterio-logical laboratory. Smears are prepared from the suspension obtained by washing the six-layer gauze with physiological solution; seeding and infection of animals are carried out with the suspension.

"We conducted 95 bacteriological analyses of air in rooms of the barracks. Camples were taken while the barracks was occupied. Air was simultaneously investigated by D'Yakanov's method. A D'yakanov flask was connected to the gas mask. A gas meter permitted us to establish the fact that a man in a gas mask equipped with a filter cartridge inhales 6 liters of air per minute. The same volume of air is inhaled if a D'yakanov flask is attached to the gas mask. One ml of suspension was seeded on a Petri dish containing agar. The seedings afforded the growth of microorganisms encountered in the air (Sarcina, Staphylococcus, grampositive bacilli, molds, and fungi).

"The same microorganisms were isolated from the air with the filter cartridge as were isolated when samples were collected with the D', encv flask. In 22 air samples, the quantity of microorganisms was found to be greater on collection with the filter cartridge; in 53 samples, the quantity was only slightly greater than that found in samples collected by the D'yakanov method; in 20 samples, analogous results were obtained.

Sum. 1345

NIKHINSON, I.M.

Fifteen air samples were taken in the barracks immediately after the personnel had arisen, and the same number were taken after the quarters had been ventilated. Ventilation decreased the microbial content of the air in the barracks 2-2.5 times.

"With the help of the filter cartridge the unit physician can check the ventilation in the barracks. The simplified method of collecting air samples can be employed for determining the species content of the microflora. We investigated the air in a laboratory box after dispersing a suspension of Staphylococcus aureus and intestinal bacilli in it. These microorganisms always infected the gauze packing of the filter. The filter cartridge can also be used expediently under field conditions in cases where rapid collection of air samples for detecting microflora is required." (U)

Sum. 1345

Country: USSR
Calegory: Virolage. Viruses of Man and Animals. Ricketusias.

Abs Jour: Ref Zhur-Biol., Mc 23, 1958, No 103590

Lustor : Mikhinson, I.M.; Kambur, I.B.; Savchenko, E.M.
Listo : The Country of The Country

Card : 1/1

A case of ornithosis. Vrach.delo no.2:191 F '59.

(A Case of ornithosis.delo no.2:191 F '59.

(A Case of ornithosis.

NIKHINSON, I.M.; DOBRAYA, T.Ye.; YASHEK, Kh.N.

Virological and serological features of the influenza outbreak in Kharkov and districts of Kharkov Province in the first quarter of 1959. Vop. virus. 5 no. 6:751 N-D '60. (MIRA 14:4) (KHARKOV PROVINCE—INFLUENZA)

NIKHINSON, I.M.; BASKOVICH, TS.L.; SHVETS, TS.I.

Method for the bacteriological study of convalescents and those who have had dysentery. Lab. delo 7 no.12:36-37 D '61.

(Mid 1/:11)

1. Khar'kovskaya oblastnaya sanitarno-epidemiologicheskaya stantsiya (glavnyy vrach I.I.Chernov).

(DYSENTERY)

ACC NRI AP6	O31640 (A) SOURCE CODE: UR/0240/66/000/009/0080/0081		
	khinson, I. M.; (Candidate of medical sciences; Khar'kov); a, V. M. (Khar'kov); Kurasova, Zh. V. (Khar'kov)		
ORG: none			
	ge typing pathogenic staphylococci		
source: Gi	giyena i sanitariya, no. 9, 1966, 80-81		
TOPIC TAGS: staphylococcus, pathogen, phage, typing, diagnostic medicine,			-
ABSTRACT:	Staphylococci isolated from human feces were phage typed into three basic groups and then into subgroups. This method was compared with results of standard tests and found to be faster and more accurate. [WA-50; CBE No. 12]		
SUB CODE:	06/ SUBM DATE: 29Jan66/ URIG REF: 004/		
1		-	
	UDC: 576.851.252.06.077.5		·
Card 1/1			

AUTHOR TITLE FIRRISSON L.M., Chief Bureau of Mechanisation PA = 3060 Hechanisation of work intensive processes. (Mekhanisatsiya trudoyenkikh protessov.- Russian)

PERIODICAL

1. 6 . 4 .

Metallurg 1957, Vol 2, Nr 4, pp 29 - 50 (USSE)

ABSTRACT

Received: 5/1957 Reviewed: 7/1957 The eircumstance that future mechanisation was not taken into account when the Eusnetck Metallurgical Combinate was built makes this mechanisation extremely difficult. Nevertheless, much progress has been made in the postwar years. 982 different measures made it possible to withdraw and use otherwise about 3000 workers and to make easier the work of 5000 others. A reserve of performance increase is the cutting of the time of furnace lay-offs at repairs. Here it was possible by mechamisation and better organisation to save about 4.5 days per blast furnace. The Martin furnaces have the shortest interraptions in their werk in the entire USSR. The workers of the soke furnaces showed much seal and initiative in finding a special mechanised settler for the exchange of the mountings of the regenerators of the coke furnaces without interrupting the operation of the furnaces. Nevertheless much still has to be done. The plants and the specialised institutes must work out efficient methods of cooling the furnaces after they have

CARD 1/3

Mechanisation of work intensive processes.

PA - 3060

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been laid off. Many interesting devices have been introduced in the rolling mills of the Combinate; manipulary rulers with pneumatic drive at the lifting platforms of the fine staging of the plate-rolling mill, mechanical edgers for semifinished material and ingots, etc. Many stages of production formerly were bottlenecks because they had to be done manually. Under difficult conditions of the plant which was under continuous operation the conveyance of rails to the countersink was mechanised (by means of tractors and roll tables) resulting in the availability of 112 workers of rother purposes and in an increase of the performance by 50 %. Simultaneously the weight of the rails was increased to 75 kg per running meter. Nevertheless, a complete mocernisation of the rolling trains still is lacking. Loading and unloading are already highly mechanized. In order to make a mechanization in the transport division possible, the depots for raw materials and fuel had to be reconstructed, new types of wagons had to be created and old ones rebuilt. The degree of mechanisation rose to 94 %. But even here many things still have to be done. At present, mechanisation of the work in the forehearth trench of the blast furnace is under

CARD 2/3

Mechanization of work intensive processes.

PA - 3060

review, as well as a widening of the openings for steel discharge, the elimination of mounted bricks from the regenerators of the Martin furnaces, cleaning of the doors of the coke furnases, etc. Many work intensive operations of the cleaning of the rolling products have not yet been mechanized: punching, sorting and packing. Many things still are imperfect. Not only the Combinate is interested in improvements. The paper under review exptesses regret that no help is forthcoming from the Ministry of Iron Metallurgy. Neither standard machines nor transport equipment are supplied by the Ministry so that the Combinate itself had to construct a freight ear in its Transport Division and a mobile exeavating machine still is needed so that soil has to be moved by manual

ASSOCIATION: Kuznetsk Metallurgical Combinate, Stalinsk. (Kuznetskiy Metallurgicheskiy Kombinat, Stalinsk - MKM) PRESENTED BY:

SUBMITTED:

AVAILABLES

Library of Congress.

CARD 3/3

NIKHINSON, Yu.I., inzh.; TESLENKO, L.F., inzh.

Preparing the welding wire for welding in carbon dioxide.

Svar. proizv. no.6:39 Je. *63. (MIRA 16:12)

1. Khar'kovskiy traktorosborochnyy zavod.

ZOGRAFKI, Str.; NIKHTIANOV, Khr.; DASHEV.G.

Successful surgery of a case of pheochromocytoma. Khirurgiia (Sofiia) 16 no.10:959-961 *63.

1. Iz katedrite po bolnichna khirurgiia i po endokrinologiia i bolesti na obmianata pri ISUL, Sofiia.

AND THE PROPERTY OF THE PROPER

GRUNER, Matilda, inz.; NIKIC, Milutin, inz.; FIIAJDIC, Mirko, dr.inz.

Color of nitrosomyoglobin during the processing of frankfurters. Kem ind 12 no.9:665-669 S '63.

1. Biotehnoloski odjel, Tehnoloski fakultet, Zagret.

2. Clan Redakcionog odbora, "Kemija u industriji" (for Filajdic).

S/076/63/037/001/011/029 B101/B186

AUTHORS:

Kondrat'yev, V. P., Nikich, V. I. (Moscow)

TITLE:

Electrical conductivity of aqueous solutions of alkaline

earth chlorides at high temperatures

PERIODICAL: Zhurnal fizicheskoy khimii, v. 37, no. 1, 1963, 100-105

TEXT: The data on the electrical conductivity & of aqueous solutions of $MgCl_2$, $CaCl_2$, and $SrCl_2$ in molal concentrations of 0.05 - 1.0 m and 0.5 m $BaCl_2$ at 25 - 300°C, which so far have not been published, were calculated and are here tabulated. At rising temperature & was found to pass a maximum. $\mathbf{X} = Ac^k \exp\left[-B(T_{max} - T)^2/T\right]$, where c is the molal concentration, and A, B, k are empirical constants, is valid in the above range of temperatures and concentrations. The occurrence of max at a certain temperature is explained by the assumption that the dissociation of the electrolytes decreases as the temperature increases. At lower temperatures the salts are completely dissociated, their & depends on the Card 1/2

\$/076/63/037/001/011/029 Electrical conductivity of aqueous ... B101/B186

radius of the solvated ion, i. e. on its mobility, and forms the sequence ${\rm Mg}^{2+}$ Ca $^{2+}$ Csr $^{2+}$ CBa $^{2+}$. The mobility increases and the amount of the dissociated ion decreases as the temperature rises. Hence, & occurs at a certain temperature. Besides, hydrolysis takes place at high temperatures causing the appearance of highly mobile \mathbf{H}^{+} .ions. The sequence MgCl₂ > CaCl₂ > SrCl₂ > BaCl₂ holds for at 0.05 m, owing to the different tendency of the studied alkaline earth compounds to hydrolyze. There are 6 figures and 4 tables.

ASSOCIATION:

Moskovskiy knimiko-tekhnologicheskiy institut im. D. I. Mendeleyeva (Moscow Institute of Chemical Technology imeni

D. I. Mendeleyev)

SUBMITTED:

September 27, 1961

Card 2/2

NIKICH, V.I., CORBACHEV, S.V.

Specific gravity of electrolyte solutions in anhydrous acetic acid at high temperatures. Trudy MKHTI no.44241-44 64.

(MIRA 18:1)

Specific conductivity of electrolyte solutions in anhydrous acetic acid at high temperatures. Ibid. 145-49

Relaxation equations for the magnetic moment of a cound epin system. Teoret. i eksper. knim. i nc.44505-510 (65. (MIRA 18:10))

1. Institut khimicheakey fiziki AN SSSR, Meskva.

NIKIEL, Hikoden

CONTROL SECTION CONTROL CONTRO

Histoplasmosis. Polski tygod. lek. 11 no.3:126-130 16 Jan 56.

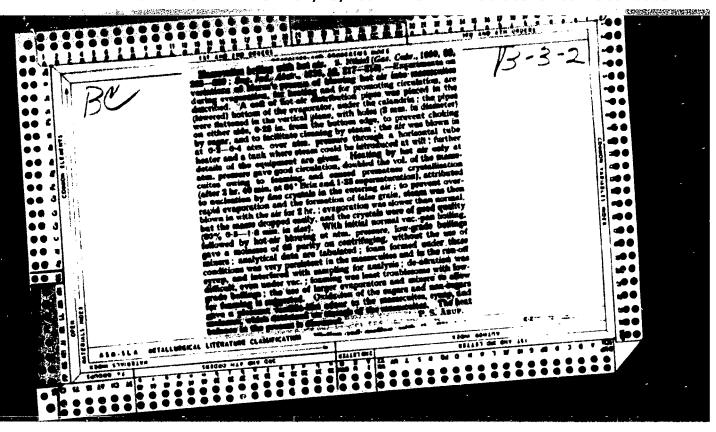
1. Z II Odds. Chorob Vewnet. I.D.S. K.L. w Warszawie. kier. prof. dr. med. Walenty Hartwig, Wagrowiec, ul. Jednosc 8 m. 1.

(HISTOPLASMOSIS review.

NOWAK, Karol, mgr inz.; WILCZYNSKA, Jadwiga, inz.; NIKIEL, Stefan

Biuret as an impurity in fertilizing urea. Chemik 16 no.7/8:
189-192 Jl-Ag '63.

1. Zaklady Azotowe, Kedzierzyn.

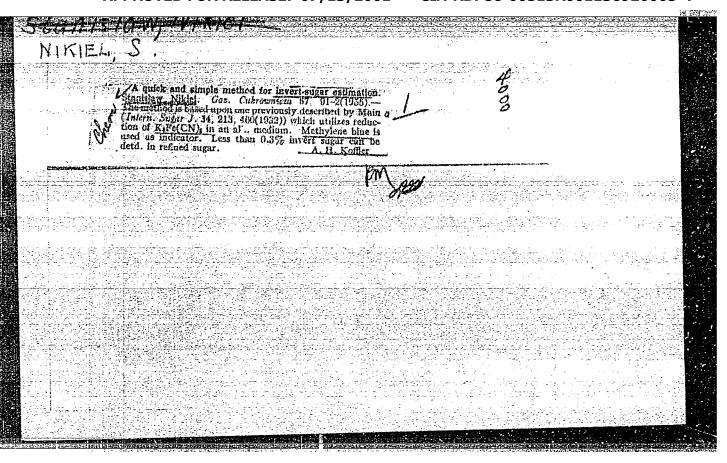


CA

Meassociates bedding with hot air. S. bilkied. Gas. Cubrowness 80, 223-6(1850).—Expts. on variations of Morse's process of blowing bot air into massociates during evaper. for heating and for promoting circulation, are described. A coil of hot-air distribution pipes was placed in the (lowered) bottom of the evaporator, under the calandria; the pipes were flattened in the vertical plane, with holes (3 mm. in diam.) on either side, 0.25 in. from the bottom edge, to prevent choking by sugar and to facilitate cleaning by steam; the air was blown in at 0.3-0.4 afth. over atm. pressure through a horizontal tube heater and a tank where steam could be introduced at will; further details of the equipment are given. Heating by hot air only at atm. pressure gave good circulation, doubled the voil. of the massociates owing to foaming, as 164 Bein and 1.33 superants.), attributed to nucleation by fine crystals in the entering air; attributed to nucleation by fine crystals in the entering air; attributed to nucleation which blown in with the air for 2 hrs.; evaporario, steam was then blown in with the air for 2 hrs.; evaporario, steam was then blown in with the air for 2 hrs.; evaporario, was slower than sormal, but the mass decopped easily, and the crystals were of good quality thoding, followed by hot-air blowing at eatm. pressure, low-grade builings gave a molasses of 55 parity on centrifuging. However, foam forward under these conditions was very persistent in the massociates and in the run-off surup, and interfered with sampling for analytical data are tabulanted; foam forward under these conditions was very persistent in the massociates and in the run-off surup, and interfered with sampling for analytical data are tabulanted; foam forward under mineral sates troublesome with low-grade boilings; the use of larger evaporators and minera and amongars gave a pheanant vamilin-like order to the massociates.

The heat balance in the process is discussed.

B. A.



NIKIEL, STANISLAM

POLAND/Chemical Technology. Chemical Products and Their Application.

Carbohydrates and Refinement.

H-26

Abs Jour: Referat Zhur-Khimiya, No 5, 1958, 15912

Author : Mikiel Stanislaw

Inst

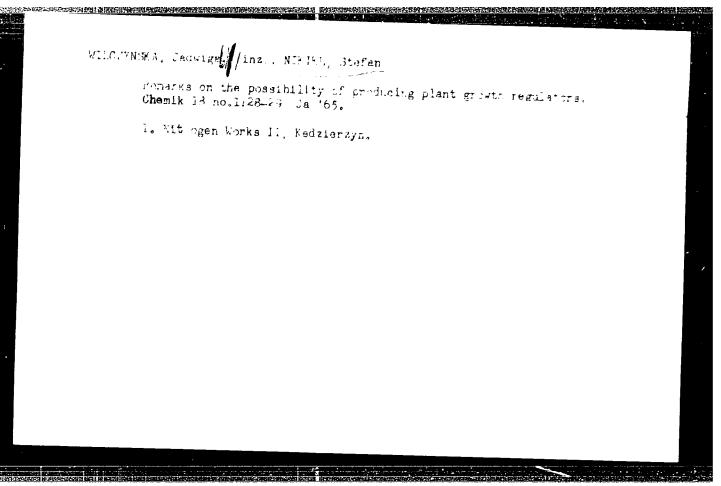
Title : What Is New in the Chemistry of Saccharose and Non-Sugars.

Orig Pub: Gaz. cukrown., 1956, 58, No 10, 229.

Abstract: Brief information concerning the possibility of obtaining from

sugar various derivatives which can be utilized as detergents, emulsifying agents, plastics and explosives. A brief description of the methods of production and principal character'stics of the following: acetyl saccharose, allyl saccharose, sorbitol, mannitol, betaine, riboflavin, levulinic acid, etc.

Card : 1/1



NIKIEL, T.

Modernization of steam turbines. p. 236.

ENEREGTYKA, Vol. 9, No. 5 Sept./Oct. 19:5

(Ministerstwo Energetyki) Stalinogrod.

SOURCE: EAST E HCP AN ACCESSIONS LIST Vol. 5, No. 1 Jan. 1956

	Turbiny Pare	owe (Steam	Tyrbines).	. Warsaw:	Pan twowe	- Myrdawn Lotwa	Technicane,	395%
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CONTRACTOR OF THE SECOND SERVICE SERVI

JEDYNAK, Mieczyslaw, inz.; RUBASZOWSKI, Tadeysz, inz.; BIALY, Adam, inz. BOTWINA, Mieczyslaw, inz.; MARTLIA, Ludwik, inz.; NIKIEL, Tadeusz, inz.; LIZEWSKI, Waclaw, inz.

Increasing the maximum power of 55 MW Skcda steam turbines during the peak period by 3 MW, during 3 hours, for each turbine. Increasing the maximum power of 20 FW Alsthor steam turbines during the peak period by 1 MW, during 3 hours, for each turbine. Gosp paliw 11 Special issue no.(95):58 Ja 163.

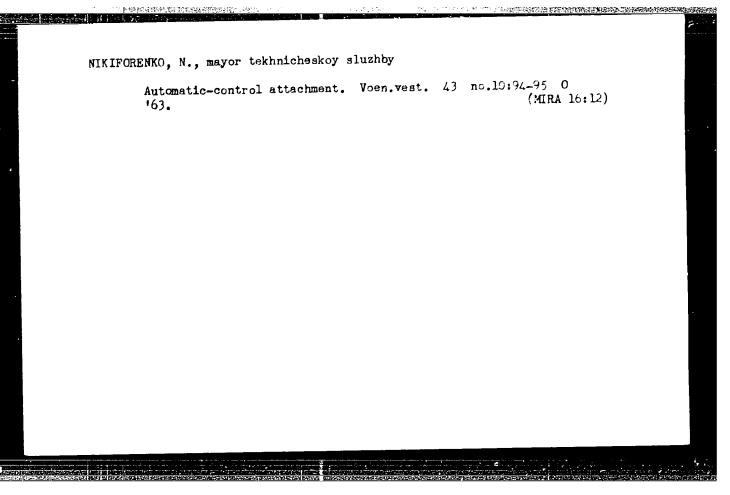
1. Elektrownia Stalowa Wola.

SAPOZHNIKOVA, S.A.; MEL', M.I.; SMIRNOVA, V.A.; NIKIFONOVA, A.T.

Evaluating the climatic and agricultural resources of the U.S.S.R.

Trudy NIIAK no.2:78-115 '57. (MIRA 11:9)

(Crops and climate)



AUTHOR:

Nikiforenko N.N.

SOV/68-58-10-6/25

THE STATE OF THE S

TITLE:

A Universal Automatic Sampling Installation for Coke and Coal (Universal'nyy avtomaticheskiy probootbornik koksa ili uglya)

PERIODICAL: Koks i Khimiya, 1958, Nr 10, pp 19 - 20 (USSR)

ABSTRACT: An automatic sampling installation for coke and coal taking samples from a stream of material falling from a conveyor belt by diverting the falling material at pre-determined time intervals into a sampling vessel is described and illustrated. The sampling installation and its electrical scheme are shown in Figures 1 and 2, respectively. It is claimed that the installation operates on the Kharkov

Coking Works with satisfactory results.

There are 2 figures.

ASSOCIATION:

Khar'kovskiy koksckhimicheskiy zavod (Kharkov

Coking Works)

Card 1/1

GESTRIN, N.P. [Hestryn, N.P.]; NIKIFORENKO, V.A. [Nykyforenko, V.A.]

Improving the production of polyu.rylamide in the Mizoch and Sambor sugar factories. Kharch.prom. ne.4:16-20 0-D '63. (MIRA 17:1)

THE REPORT OF THE PROPERTY OF

EWT(d)/EWT(m)/EWP(w)/EWP(j)/EWP(t)/ETI/EWP(k)L 06590-67 IJP(c) JD/EM/RM/JH ACC NR: AP6029852 (N) SOURCE CODE: UR/0032/66/032/008/0962/0965 AUTHOR: Budenkov, G. A.; Nikiforenko, Zh. G.; Shkol'nik, I. E. ORG: All-Union Scientific Research Institute for the Development of Nondestructive Methods and Means of Controling the Quality of Materials (Vsesoyuznyy nauchno-issledovatel'skiy institut po razrabotke nerazrushayushchikh metodov i sredstv kontrolya kachestva materialov) TITLE: An estimate of the stress state of a material with the aid of ultrasound 15 ٩m SOURCE: Zavodskaya laboratoriya, v. 32, no. 8, 1966, 962-965 TOPIC TAGS: stress analysis, ultrasonic wave, ultrasonic wave propagation, anisotropic medium, elasticity theory, elastic stress ABSTRACT: A method was developed for determining the mechanical stress in solid bodies according to their anisotropic parameters. Third-order nonlinear elastic equations were given relating stress to deformation and to the speed of three-dimensional shear waves. The latter equations showed that in the presence of stress, solid bodies are governed by anisotropic elasticity. The experimental and theoretical dependence between elastic stresses and the shear parameters of elastic oscillations in various materials was developed from the frequency ultrasonic polarization method of measuring internal stresses in solids. Elastic anisotropy was determined by measuring the fre-UDC: 620.179.16 Card 1/2

L 06590-67 ACC NRI AP6029852

quency. The emitter and receiver were positioned so that the direction of the oscillation feed would remain at an angle of $\pi/4$ with the principle plane. In this case, the amplitude of electrical oscillations impinging on the receiver varied according to a cosine law. The change in frequency for a constant path length of elastic oscillations in anisotropic media is given as a function of the relative change in velocity of the shear wave $(\Delta v/v_g)$. A block diagram of the experimental apparatus is given. Testing

was done on samples of organic glass, a D16T aluminum alloy, and fine-grained concrete. Prismatic samples were compressed; the amplitude-frequency characteristics and the relative change in shear wave velocity are given as a function of the axial stress. From these, the third order constants A and B were determined, where $A = -(\Delta v/v \cdot 8\mu^2/\sigma + 4\mu)$. The dependence of $\Delta v/v$ on stress is linear and is represented by the equation

$$\Delta v/v_g = \sigma/8\mu^2 (4\mu + A).$$

The relative error in the method was 2-3%. The cause of anisotropy was preferred orientation due to rolling. Orig. art. has: 4 figures, 9 formulas.

SUB CODE: 11,20/ SUBM DATE: none/ ORIG REF: 002/ OTH REF: 005

Ultrasonic Applications

Card 2/2 LS

ACC NR. AP6021473

SOURCE CODE: UR/0413/66/000/011/0094/0094

THE RESIDENCE OF THE PROPERTY OF THE PROPERTY

INVENTOR: Zhuravel', V. I.; Minakov, V. I.; Bobrov, V. T.; Dimitraki, P. N.; Niki-forenko, Zh. G.; Budenkov, G. A.; Gitia, M. B.

ORG: None

TITLE: An ultrasonic pulse-shadow immersion flaw detector. Class 42, No. 182390 [announced by the All-Union Scientific Research Institute of Nondestructive Methods for Material Quality Control (Vsesoyuznyy nauchno-issledovatel skiy institut nerazrushayushchikh metodov kontrolya kachestva materialov)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 11, 1966, 94.

TOPIC TAGS: flaw detection, ultrasonic flaw detector, quality control

ABSTRACT: This Author's Certificate introduces: 1. An ultrasonic pulse-shadow immersion flaw detector which contains an ultrasonic probe unit, line scanning mechanism, oscillator and ultrasonic amplifier. The unit is designed for increased productivity in checking parts of complex shape. The installation incorporates an electronic unit which generates a control signal after the ultrasonic probe unit passes beyond the outline of the part being checked. This signal controls the line scanning mechanism and temporarily disconnects the receiving head from the amplifier. 2. A modification of this flaw detector in which the electronic unit is made in such a

Card 1/2

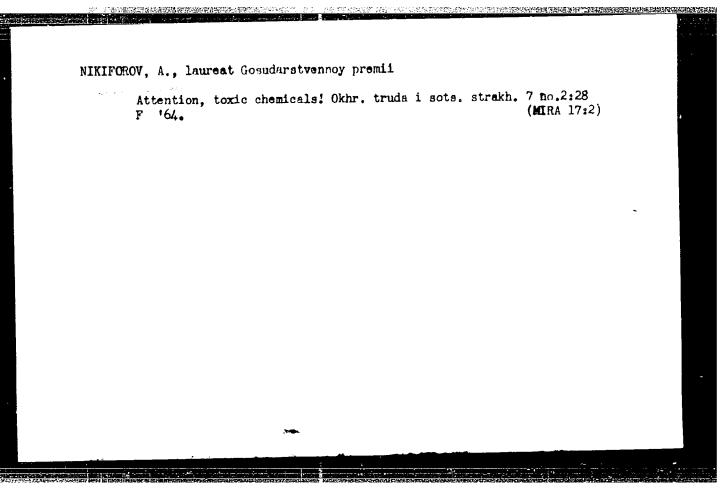
UDC: 620:179.16.08

ACC NR. AP6021473

way that when there is a single pair of ultrasonic probes in the installation the receiver head is disconnected from the amplifier during the period when the probe unit is returning to the article being checked. 3. A modification of this flaw detector in which the electronic unit is made in such a way that when there are two pairs of ultrasonic probes located one behind the other along their line of motion in the installation, the receiver head disconnected from the amplifier is the one which first passes beyond the outline of the part being checked. This receiver head is connected when the second pair of probes passes beyond the outline of the part on the return travel of the probe unit.

SUB CODE: 09, 13/ SUBM DATE: 07Dec64

Card 2/2



L 54849-65 UR/0348/65/000/006/0024/0025 ACCESSION NR: AP5014673 632.952 AUTHORS: Korolav, P. (Engineer, Chemist); Mikiforov. A. (Agronomist) TITLE: Promising fungicides SOURCE: Zashchite rastenly of wrediteley 1 bolesney, no. 6, 1965, 24-25 TOPIC TAGS: agriculture, fungus, fungicide ABSTRACT: In recent years the MSKh SSSR State Committee for chemical means of controlling agricultural pests, diseases, and weeds has tested foreign and domestic fungicides. It recommends the release of the following types. N-trichloromethylthiotetrahydrophthalamide, 2,3-dichloro-naphthoquinone-1,4-, mercurchexane (1% ethylmercurochloride, 20% hexamhlorobenzene, 12% gamma isomer GKhTsG, and 67% filler), phthalane (the active part of N-trichloromethylthiophthalamide), copper oxychloride, sinc ethylenebisdithiocarbamite, and sinc dimethyldithiocarbamato. The article contains physical descriptions, the necessary amounts, the modes of application, the times of application, the action, and other characteristics of the above substances. ASSOCIATION: none Card 1/2

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001136920005-4

L 54849-65 Accession NR: AP5014673		0
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NIKifORT, A.A.

Tractor "Utalinets-80" 2. izd. Moskva, Gos. ign-vo soltknoz. iit-mo. in. . i > m. (51-15494)

51233.0423 1948

NIKIFOROV, A.M. (Moskva); MAMAYEV, K.A. (Moskva)

Chemical weeding. Biol. v shkole no.3:69-71 My-Je '61. (MIRA 14:7)

(Herbicides)

NIKIFOROV, A	m of the State Cor	mmittee for Poisonou	s Chemicals. Zashch.	
rast.	(Insecticides)	6 no.5:58-59 My '61. (Pesticides)	(MIRA 15:6) (Herbicides)	

KRYUKOV, G. P.; MIKIFOROV, A. M.; PETRUSHOVA, W. I., starshiy nauchayy sotrudnik; GRANIN, Ye. F., nauchayy sotrudnik

Questions and answers. Zashch. rast. ot vred. i bol. 6 no.69 39-40 Je '61. (MIRA 16:4)

1. Zaveduyushchiy otdelom okhrany truda TSentral'nogo komiteta professional'nogo soyuza rabochikh i slushashchikh sel'skogo khosyaystva i zagotovok (for Kryukov). 2. Wikitskiy botani-cheskiy sad, Yalta (for Petrushova). 3. Wauchno-issledovatel'skiy institut po udobreniyam i insektofungisidam imeni Samoylova (for Granin).

(Plants, Protection of)

NIKIFOROV, A.M.

Extensive regiments with agricultural chemicals. Zemledelie 23 no.6 91-92 Je '61. (MIRA 14:6)

1. Glavnyy agronom Gosudarstvennoy komissii po khimicheskim sredstvam bor'by s vreditelyami, boleznyami rasteniy i sornyakami pri Ministerstve sel'skogo khozyaystva SSSR.

(Algricultural-chemicals)

NIKIFOROV, A.M.; SERBINOV, V.I., dotsent

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Questions and answers. Zashch. rast. ot vred. i bcl. 6 no.10:45 0 61. (MIRA 16:6)

1. Tashkentskiy sell'skokhozyaystvenayy institut.
(Plants, Pretection of)

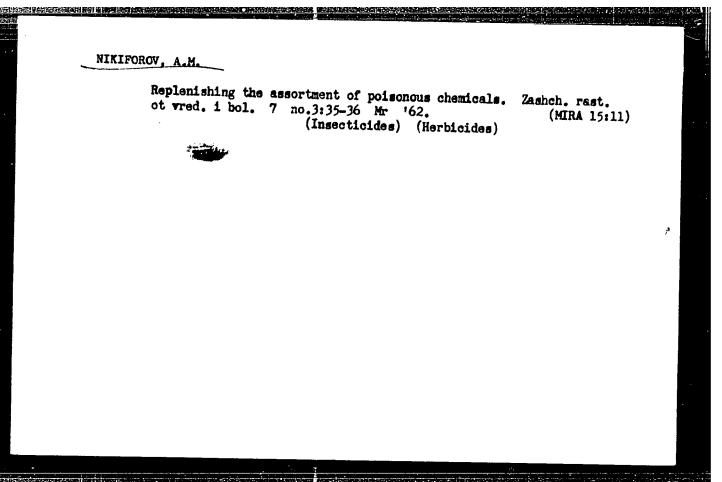
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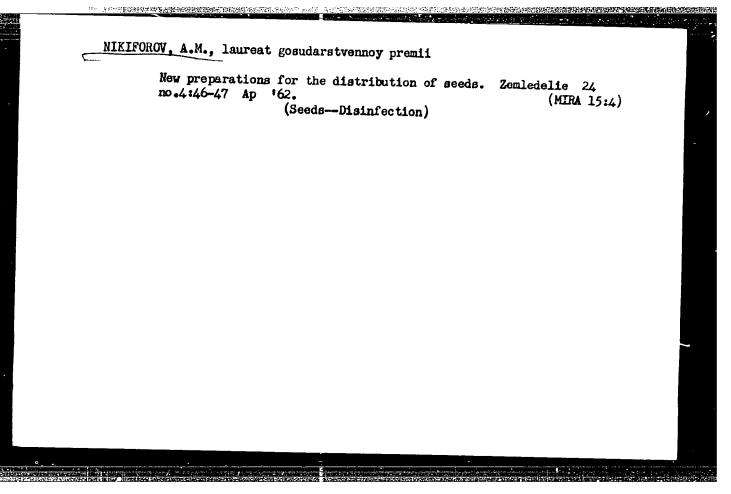
KIRYUKHINA, R.I.; NIKIFOROV, A.M.; TIKHONOV, N.P., entomolog

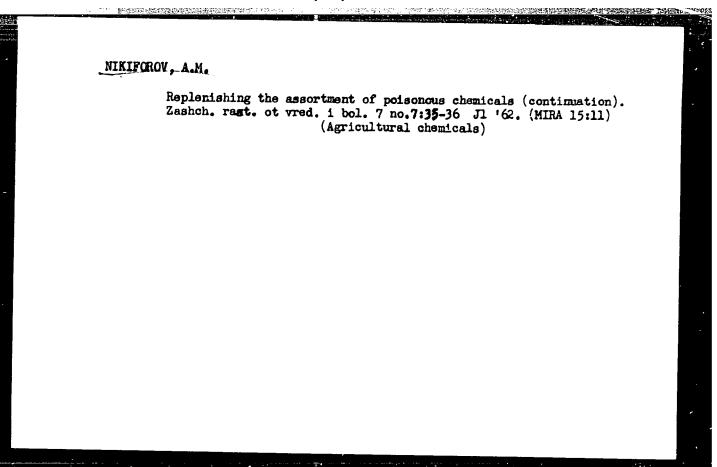
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Congresses and conferences. Zashch. rast. ot vred. 1 bol. 7 no.2:55-56 F '62. (MIRA 15:12)

1. Starshiy fitopatolog TSentral'noy karantinnoy laboratorii Ministerstva sel'skogo khozyaystva SSSR (for Kiryukhina).
(Plants, Protection of—Congresses)







The state of the s

NIKIFOROV, A.M., agronom; ZUBOV, M.F., fitopatolog

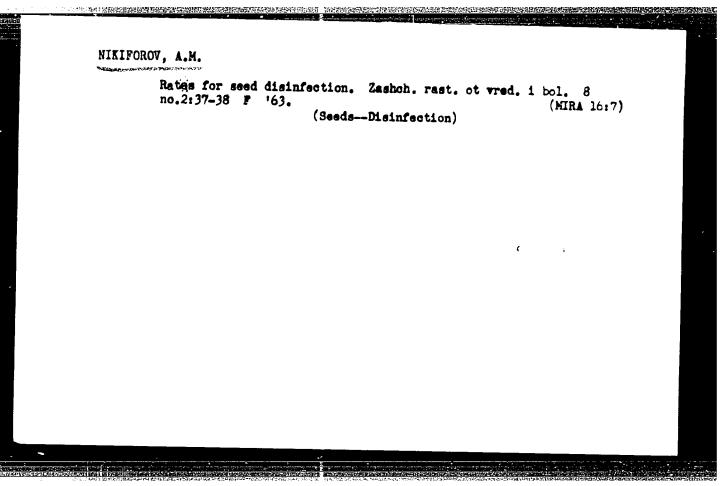
Questions and answers. Zashch. rast. ot vred. i bol. 7 no.12:40 D 162. (MIRA 16:7)

1. Nauchno-issledovatel'skiy institut po udobreniyam i insektofungisidam imeni Ya.V. Samoylova. (Insecticides) (Fungicides)

In the Sta ot vred. i	te Commission on P bol. 7 no.12:56-5	oisonous Chemicals. Zashch. rast. 7 D 62. (MIRA 16:7)	
	(Insecticides)	(Fungicides)	

KACHALOVA, Z.P., kand. sel'khoz. nauk; KHARITONOV, D.M. Prinimali uchastiye: MAMAYEV, K.A., agronom; NIKIFOROV, A.M., agronom; CHELYSHKIN, Yu.G., red.; DEYEVA, V.M., tekhn. red.

[Controlling pests and diseases of field crops] Bor'ba s vrediteliami i bolezniami polevykh kul'tur. Moskva, Sel'khoz-izdat, 1963. 207 p. (MIRA 16:5) (Field crops-Diseases and pests)



KOROLEV, P.A.; NIKIFOROV, A.M.; SHAPIRO, I.D.; VILKOVA, N.A.; DROZDOVSKIY, E.M.

Quastions and answers. Zashch. rast. ot vred. i bol. 8 no.2:
39-40 F 163. (MIRA 16:7)

(Plants, Protection of)

NIKIFOROV. A.M.; ZARING, P.V. [deceased]; MILOVIDOVA, N.D., red.; STREL'ITSOVA, N.P., red.; KANTOROVICH, A.P., tekhn. red.

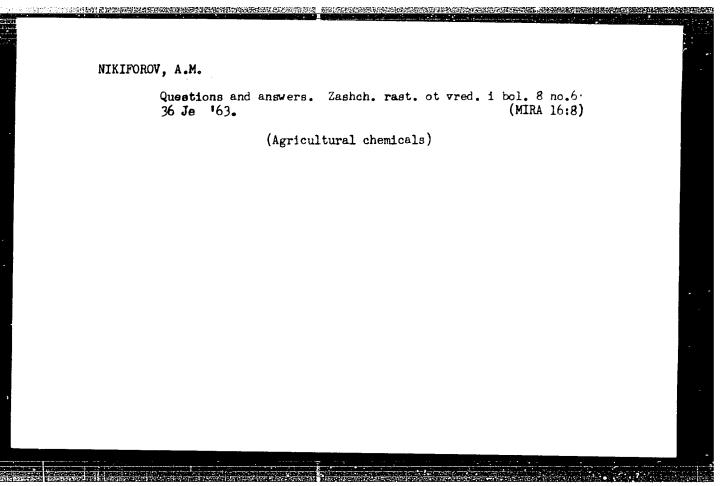
[Pests and diseases of sugar beets] Vrediteli i bolezni zakharnoi svekly. 2. izd. Leningrad, Sel'khozizdat, 1963. 34 p. (MIRA 17:4)

NIKIFOROV, A.M.; GOLUBEVA, I.A., red.; PECHENKIN, I.V., tekhn.

[Chemical means for controlling plant pests, diseases, and weeds] Khimicheskie sredstva bor'by s vrediteliami, bolezniami rastenii i sorniakami; kratkii spravochnik. Moskva, Sel'khozizdat, 1963. 84 p. (MIRA 17:1)

1. Russia (1923- U.S.S.R.) Gosudarstvennaya komissiya po khimicheskim sredstvam bor'by s vreditelýami, boleznyami rasteniy i sornyakami; kratkii spravochnik. Moskva, Sel'khozizdat, 1963. 84 p. (MIRA 17:1)

1>



NIKIFOROV, A.M.; KOROTKIKH, C.I., kand.sel'skokhoz.nauk

Questions and answers. Zashch. rast. ot vred. i bol. 8 no.7:39
J1 '63. (MIRA 16:9)

RIDER, V.A.; POLYAKOV, M.A.; DROZDOVSKIY, E.M., kand. sel'skokhoz. nauk; NIKIFOROV, A.M.; NEMTSOVA, I.A., fitopatolog

CHANGE THE SECOND ASSESSMENT OF THE SECOND S

Questions and answers. Zashch. rast. ot vred. i bol. 8 no.3:37,39 Mr '63. (MIRA 17:1)

1. Nachal'nik Voronezhskoy stantsii zashchity rasteniy (for Rider). 2. Nachal'nik Verkhnekhavskogo otryada po bor'be s vreditelyami i boleznyami rasteniy (for Polyakov).

THE STATE OF THE PARTY OF THE P

GERASIMOV, B.A.; BRUDNAYA, A.A.; KOROTKIKH, G.I., kand.sel*skokhoz.nauk; NIKIFOROV, A.M., agronom-entomolog

Questions and answers. Zashch. rast. ot vred. i bol. 8 no.9: 39 S '63. (MIRA 16:10)

1. Nauchno-issledovatel'skiy institut ovoshchnogo khozyaystwa, Moskovskaya oblast' (for Gerasimov).

KALASHNIKOV, K.Ya., kand. sel'skokhoz. nauk; BRUDNAYA, A.A., kand. sel'#khokhow. nauk; ZUBOV, M.F., kand. sel'skokhoz. nauk; KOROLEV, P.A.,
inzh.-khimik; NIKIFOROV, A.M.

Questions and answers. Zashch. rast. ot vred. i bol. 9
no.8:34-35 '64. (MIRA 17:12)

THE TAX TOWN A SECRETARING SECURITIES AND PROPERTY OF THE PROP

NIKIFOROV, A.M., agronom po zashchite rasteniy; KALASHNIKOV, K.Ya.; kand. sel'skokhoz. nauk (Pushkin, Leningradskoy obl.); ZUBOV, M.F., kand. sel'skokhoz. nauk

Questions and answers. Zashoh. rast. ot vred. i bol. 9 nc.9:34-35 (MIRA 17:11)

1. Vse soyuznyy nauchno-issledovatel 'skiy institut khimicheskikh sredstv zashchity rasteniy (for Zubov).

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Divide a model of the following of the state of the

KOVRIZHIN, A.K.; NIKIFOROV, A.I.; VAGAPOV, M.S.

THE REPORT OF THE PROPERTY OF

Observing the manifestation of rock pressure in the rapid advancement of a stope by narrow-cut mining. Vop. gor. davl. no.18:23-29 '63.

(MIRA 18:7)

1. Kuznetskiy nauchno-issledovatel'skiy ugol'nyy institut.

NIKIFORCV, A. N.: Master Agric Sci (diss) -- "dutuvatic, succeed as an existure-discharging irrigation on the chestnut soils of Transvolga". Sarativ, 1958. 15 pp (Min Agric USSR, Saratov Agric Inst), 100 ceptes (KL, No. 1), 1959, 199)

S/148/62/000/002/008/008 E071/E435

AUTHORS:

Vasin, Yu.P., Nikiforov, A.P.

TITLE:

A new method of (quality) control of core mixes

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Chernaya metallurgiya, no.2, 1962, 138-141

A method of quality control of core mixes for the content of sulphite lyle at various contents of refractory clay, coarse and fine sands, based on pH measurements of aqueous extracts with an addition of alkali was developed. The method consists of the preparation of a calibration tertiary diagram (clay, sand, sulphite lyle) with curves of a constant pH which can be subsequently used for the control purposes. To increase the sensitivity of the method an addition of alkali or acid to the water extract is necessary. There are 1 figure and 1 table.

ASSOCIATION: Chelyabinskiy politekhnicheskiy institut

(Chelyabinsk Polytechnical Institute)

SUBMITTED:

January 11, 1961

Card 1/1

VASIN, Yu.P.; NIKIFOROV, A.P.

Determination of soluble glass ration by the pH value. Lit. proizv. no.7:38 J1 '62. (MIRA 16:2) (Soluble glass—Testing) (Hydrogen ion concentration)

VASIN, Yu.P., dotsent; MIKIFOROV, A.P., inzh.

Rapid method of determining the modulus of liquid glass by the value of the hydrogen index. Stroi.mat. 9 no.3:35-26 Mr '63.

(Glass)

(Glass)

NIKIFOROV, A.P.; VASIN, Yu.P.

Mold pasts to avoid sand sticking on castings and facing mixtures on the basis of chromite from Don Valley deposits. Lit. proizv. no.8:6-7 Ag '63. (MIRA 16:10)

AID P - 5121

Subject : USSR/Aeronautics - training

Card 1/1 Pub. 135 - 6/26

Author : Nikiforov, A. P., mil. pilot class I

Title : Piloting the modern jet fighters

Periodical: Vest. vozd. flota, 10, 30-35, 0 1956

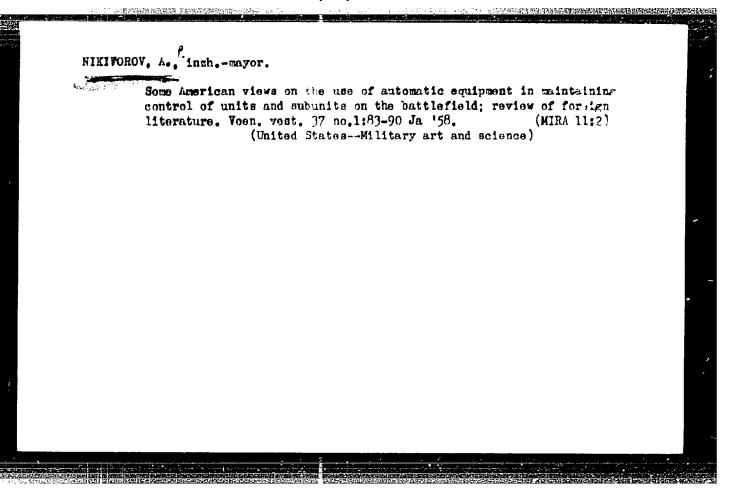
Abstract: The author discusses the problems of piloting technique

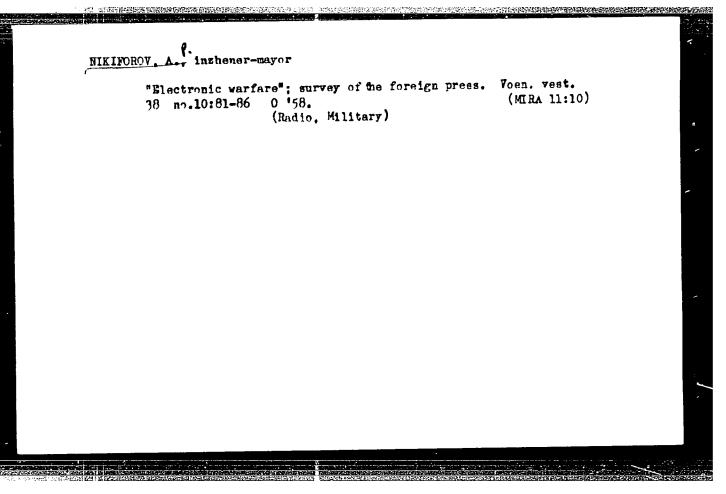
of jet fighters from the take off to the landing and points cut some our is made most frequently by young

pilots. The article is of some interest.

Institution: None

Submitted : No date





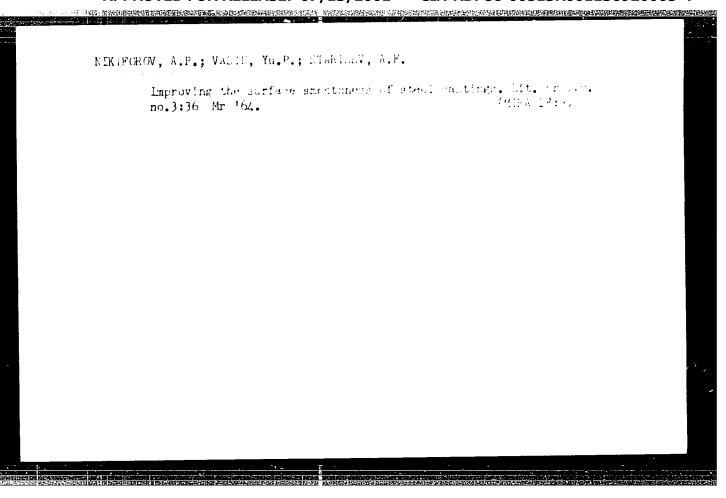
NIKIFOROV, A.P., general-mayor aviatsii voyennyy letchik pervogo klassa

The most important thing is to improve control. Vest.Vozd.Fl.
no.5:27-32 My '60.
(Flight training)

VASIM, Yuriy Petrovich, dctr.; RIKIFUROV, Aleksey favlovich, inzh.;
CHERNOCOROV, favel Vasiliyevich, prof.; AVET, Ye.B., red.

[New method of testing melding materials] Novyi metod kentrolia formovectrykh raterialsv. Cheliabinsk, Cheliabinskoe knizhnoe izd-vo, 1965. 65 p.

[MIRA: 7:8]



Operative control of the quality of core sam pixtures. Hit. proizv. no.3:43-41 Mr (64.)

VASIN, Yu.P.; NIKIFOROV, A.P.

Method of determining the modulus of water glass. lit. proizv.
no.4:41 Ap '64.

(MIFA 18:7)

Nikitorov, A)

137-1958-2-2507

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 2, p 46 (USSR)

AUTHOR:

Nikiforov, A.S.

TITLE:

The Continuous Casting of Slender Steel Ingots With Subsequent Section-rolling Without an Intermediate Heating (Nepreryvnaya otlivka stal'nykh slitkov malykh secheniy s posleduyushchey poperechnoy prokatkoy bez promezhutochnogo nagreva)

PERIODICAL:

V sb.: Nepreryvnaya razlivka stali. Moscow, AN SSSR, 1956, pp 123-128

ABSTRACT:

A report is made of experience had by the "May-1st" Factory with the use of section-rolling in the continuous casting of ingots 40 and 60 mm in diameter to be employed in the manufacture of balls for grinding mills. Steel from a 1.5 ton-capacity ladle entered a water-cooled copper crystallizer 600 mm long through a casting conduit consisting of a pouring basin and a sprue preheated to 1200-1300°. The pulling of the ingot was done with rolls, below which the ingot was cooled with jets of water. At a distance from the crystallizer of 1500-1600 mm the ingot was cut into uniform pieces with a gas torch. The average casting speed for an ingot 60 mm in diameter was 2.5-30 m/min

Card 1/2

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137-1958-2-2507

The Continuous Casting of Slender Steel Ingots (cont.)

Because it was difficult at high speed to control the casting operation by hand, a device was developed for the automatic control of the speed at which the ingot was pulled, also a device for regulating the flow of metal into the crystallizer. The pores which developed at the center of the ingots disappeared when the latter were being rolled into balls. An arrangement was worked out whereby the rod ssuing from the casting machine, having a temperature of 850-950°, was immediately transferred to the section rolling mill and the rolled balls sent on for hardening and tempering without intermediate re-heatings.

.

1. Steel castings -- Production methods

Card 2/2

NIKIFOROV, A.S.

Give priority to the development of the manufacture of particle and fiber boards. Der. prom. 11 no.7:1-3 J1 '62.

(MIRA 17:1)

1. Gosplan RSFSR.

Energy release from damped plates. Akust. zhur. 9 no.2:243-244
'63.

1. TSentral'nyy nauchno-issledovatel'skiy institut imeni A.M.

Krylova, Leningrad.

(Sound waves)

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NIKIFO!	ROV, A.S. (Leni	.ngrad)		
ton el los policientes	Generation of no.3:386-388	directed 163.	flexural waves in plates. Akust. zhur. 9 (MIRA 16:8)	
			(Sound waves)	
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	Assembly of equipment at a converter plant. Mont. i spets. rab v stroi. 25 no.11:9-12 N '63. (MIRA 17:1) 1. Gosudarstvennyy trest montazhu metallurgicheskogo	
po	l. Gosudarstvennyy trest montazna ma dallargionos dego oborudovaniya v vostochnykh rayonakh.	

BUDRIN, S.V. (Leningrad); NIKIFOROV, A.S. (Leningrad)

Passage of waves through various joints of plates. Akust. zmur. 9
no.41408-412 '63. (MIRA 17:3)

8/0046/64/010/002/0218/0223

ACCESSION NR: AP4039283

AUTHOR: Nikiforov, A, S. (Leningrad)

TITLE: Finite dimension plate radiation with arbitrary boundary conditions

SOURCE: Akusticheskiy zhurnal, v. 10, no. 2, 1964, 218-223

TOPIC TAGS: flexible oscillation, acoustic pressure, plate energy, integral transformation, fundamental mode, accountic impedance, characteristic function

ABSTRACT: It is assumed that a finite plate placed on an infinitely rigid screen possesses a given flexible oscillation distribution v(x), and the accustic pressure, generated by plate radiation in z > 0, is represented by the function p(x,z). The

energy of the radiated plate is then given by $\dot{W} = \frac{b}{2} \operatorname{Re} \left[\int_{-a/2}^{a} p(x,0) v^{*}(x) dx \right]$, and the inverse integral transformation of the functions $\mathbf{v}(\mathbf{x})$ and $p(\mathbf{x},\mathbf{z})$ are obtained in a series expansion of plate characteristic functions

 $v(x) \approx \frac{2}{a} \sum_{n=1}^{\infty} v(k_n) \cos k_n x; \ p(x,z) \approx \frac{2}{a} \sum_{n=1}^{\infty} p(k_n) e^{ik_n x} \cos k_n x,$ where k_n - wave number of n-th fundamental mode of plate vibration and k_n -Card 1/3